

PROJECT LOCATION Columbia, South Carolina

WATER LEVEL: 13 feet at time of boring,

17.75 feet on 10/17/00.

LATITUDE

DRILLING CONTRACTOR:

DRILLING METHOD: 41/4" H.S.A.

DATE DRILLED: 10/5/00

LONGITUDE

TOP OF CASING ELEVATION. 136.00

DATUM: MSL

STRATA	\				T -		LOGGED BY: JWB
DESCRIPTION	SYMBOL	DEPTH (ft.)	WELL DETAILS	DEPTH (ff)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
SILTY SAND (SM)- mostly fine sands, some low plasticity fines 20-30%, brown, slightly moist, micaceous. POORLY GRADED SANDS (SP)- mostly fine to medium sands, brown, wet.		- 0	7	0 00	GS	136.00	PROTECTIVE CASING Diameter: N/A Type: N/A Interval: N/A RISER CASING Diameter: 2 inch Type: Sch 40 PVC Interval: 0.0 - 18.67 ft. GROUT Type: NA Interval: NA SEAL Type: Bentonite Pellets Interval: 12.0 - 17.5 ft. FILTERPACK Type: Medium Sand Interval: 17.5 - 23.67 ft.
		20	Y				Type Sch 40 PVC 0.01 inch slot Interval 18.67 - 23.67 ft. LEGEND FILTER PACK TOC TOP OF CASING GS GROUND SURFACE BS BENTONITE BS BENTONITE SEAL CEMENT GROUT FP FILTER PACK TSC TOP OF SCREEN BSC BOTTOM OF SCREEN TO TOTAL DEPTH CG CEMENT GROUT STATIC WATER LEVEL CG CEMENT GROUT

134 Suber Road Columbia, SC 29210 COMPLETION REPORT OF WELL No. B102A

PROJECT: Congaree Levee

PROJECT NO: 1611-00-937

PROJECT LOCATION: Columbia, South Carolina

WATER LEVEL Dry at time of boring. Dry on

10/6/00.

LATITUDE:

DRILLING CONTRACTOR:

DRILLING METHOD: 41/4" H.S.A.

DATE DRILLED: 10/5/00

LONGITUDE:

TOP OF CASING ELEVATION: 137.10

DATUM: MSL

LOGGED BY

STRATA						LOGGED BY: JWB
DESCRIPTION	SYMBOL	WELL DETAILS	DEPTH (ft)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
SILTY SAND (SM)-mostly fine sands, some low plasticity fines 20-30%, brown, slightly moist, micaceous.	5		0 00	GS	136.00	PROTECTIVE CASING Diameter: N/A Type: N/A Interval: N/A RISER CASING Diameter: 2 inch Type: Sch 40 PVC Interval: -1.1 - 3.8 ft. GROUT Type: NA Interval NA SEAL Type Bentonite Pellets Interval 2 - 3.8 ft. FILTERPACK Type Medium Sand Interval 3.8 - 8.8 ft. SCREEN Diameter: 2 inch Type: Sch 40 PVC 0.01 inch slot Interval 3.8 - 8.8 ft.
						FILTER PACK FILTER PACK BENTONITE BENTONITE BS BENTONITE BS BENTONITE SEAL FP FILTER PACK TSC TOP OF CASING GROUND SURFACE BS BENTONITE SEAL FP FILTER PACK TSC TOP OF SCREEN TOP OF CASING GROUND SURFACE BS BOTTOM OF SCREEN TOP OF CASING TOP OF CASING



134 Suber Road Columbia, SC 29210

COMPLETION REPORT OF WELL No. B102B

PROJECT: Congaree Levee

PROJECT NO: 1611-00-937

PROJECT LOCATION: Columbia, South Carolina

WATER LEVEL: Dry at time of boring. Dry on

10/12/00.

LATITUDE.

DRILLING CONTRACTOR:

DRILLING METHOD: 41/4" H.S.A.

DATE DRILLED: 10/3/00

LONGITUDE

TOP OF CASING ELEVATION 140.40

DATUM MSL

LOGGED BY JWB

QTDATA					1	LOGGED BY JWB
STRATA DESCRIPTION DESCRIPTION	DEPTH (ft)	WELL DETAILS	DEPTH (ft.)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
LEAN CLAY WITH SAND (CL)- mostly low to medium plasticity fines, some fine sands, brown, moist, micaceous SILTY SAND (SM)- mostly fine sands, some low plasticity fines, light brown, moist, micaceous	5		0.00	GS	140.00	PROTECTIVE CASING Diameter N/A Type N/A Interval N/A RISER CASING Diameter 2 inch Type Sch 40 PVC Interval -0.4 - 1.5 ft. GROUT Type NA Interval NA SEAL Type Bentonite Pellets Interval 0.1 - 1.5 ft. FILTERPACK Type Medium Sand Interval 1.5 - 6.5 ft. SCREEN Diameter 2 inch Type Sch 40 PVC 0.01 inch slot Interval 1.5 - 6.5 ft.
					-	FILTER PACK FILTER PACK BENTONITE BENTONITE CEMENT GROUT CUTTINGS / BACKFILL STATIC WATER LEVEL TOC TOP OF CASING GS GROUND SURFACE BS BENTONITE SEAL FP FILTER PACK TOP OF SCREEN TO TOP OF SCREEN TO TOTAL DEPTH CG CEMENT GROUT

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ENGINEERING : TESTING
ENVIRONMENTAL TESTING

134 Suber Road Columbia, SC 29210 COMPLETION REPORT OF WELL No. B126A

PROJECT LOCATION Columbia, South Carolina

WATER LEVEL 7.5 feet at time of boring, Dry

on 10/12/00.

LATITUDE

DRILLING CONTRACTOR:

DRILLING METHOD: 41/4" H.S.A.

DATE DRILLED: 10/4/00

LONGITUDE

TOP OF CASING ELEVATION 122.30

DATUM: MSL

LOGGED BY: JWB

STRATA						1	LOGGED BY: JWB
DESCRIPTION	SYMBOL	DEPTH (ft.)	WELL DETAILS	DEPTH (ff.)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
LEAN CLAY WITH SAND (CL)- mostly low to medium plasticity fines, some fine sands 20-30%, brown, moist to very moist, micaceous, grades to sandy silt POORLY GRADED SAND (SP)- mostly fine to coarse sand,		- 0		0.00	GS	118 00	PROTECTIVE CASING Diameter: N/A Type: N/A Interval: N/A RISER CASING Diameter: 2 inch Type: Sch 40 PVC Interval: -4.25 - 0.9 ft. GROUT Type: NA Interval: NA SEAL Type: Bentonite Pellets Interval: 0 - 0.9 ft. FILTERPACK Type Medium Sand Interval: 0.9 - 5.9 ft. SCREEN Diameter: 2 inch Type: Sch 40 PVC 0.01 inch slot Interval: 0.9 - 5.9 ft.
wet, mottled brown		10				Poster Canada Calaba	FILTEP PACK BENTONITE BENTONITE CEMENT GROUT CUTTINGS / BACKFILL STATIC WATER LEVEL CEGEND TOC TOP OF CASING GS GPOUND SURFACE BS BENTONITE SEAL FP FILTER PACK TOP OF SCREEN TO TOP OF SCREEN TO TOTAL DEPTH CG CEMENT GROUT

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ENGINEERING TESTING
ENVIRONMENTAL SERVICES

134 Suber Road Columbia, SC 29210 COMPLETION REPORT OF WELL No. B126B

PROJECT LOCATION: Columbia, South Carolina

WATER LEVEL Dry at time of boring. Dry on

10/13/00.

LATITUDE

DRILLING CONTRACTOR:

DRILLING METHOD: 41/4" H.S.A.

DATE DRILLED: 10/3/00

LONGITUDE

TOP OF CASING ELEVATION. 144.50

DATUM: MSL

LOGGED BY. JWB

5-51-	·······					LOGGED BY. JWB
STRATA	SYMBOL	WELL	DEPTH (ft.)	LEGEND	ELEVATION (ft)	WELL CONSTRUCTION DETAILS
SANDY LEAN CLAY (CL)- mostly low to medium plasticity fines, some fine sands 35-50%, brown, moist, micaceous. SILTY SAND (SM)- mostly fine sands, some low plasticity fines, reddish brown	5		0.00	GS	144 00	PROTECTIVE CASING Diameter N/A Type: N/A Interval: N/A RISER CASING Diameter: 2 inch Type: Sch 40 PVC Interval:5 - 16.05 ft.
fines, reddish brown, slightly moist, micaceous, commonly grades to silty sand (Fill)	10					Type: NA Interval: NA SEAL Type: Bentonite Pellets Interval: 12.8 - 16.05 ft.
SILTY SAND (SM)- mostly fine sands. some low plasticity fines, light brown, slightly moist to dry micaceous.						FILTERPACK Type: Medium Sand Interval: 16.05 - 21.05 ft.
	- 15					SCREEN Diameter: 2 inch Type: Sch 40 PVC 0.01 inch slot Interval: 16.05 - 21.05 ft.
	- 20					FILTER PACK FILTER PACK BENTONITE BS BENTONITE SEAL CEMENT GROUT FP FILTER PACK TSC TOP OF SCREEN TSC TOP OF SCREEN BSC BOTTOM OF SCREEN TD TOTAL DEPTH CG CEMENT GROUT



134 Suber Road Columbia, SC 29210 COMPLETION REPORT OF WELL No. B127A

PROJECT NO: 1611-00-937

PROJECT: Congaree Levee

PROJECT LOCATION. Columbia, South Carolina

WATER LEVEL: Dry at time of boring. Dry on 10/18/00.

LATITUDE:

DRILLING CONTRACTOR

DRILLING METHOD 41/4" H.S.A.

DATE DRILLED 10/3/00

LONGITUDE:

TOP OF CASING ELEVATION: 148.00

DATUM: MSL

LOGGED BY: JWB

STRATA	 				T	FOGGED BA: JMB
DESCRIPTION	DEPTH (ft)	WELL DETAILS	DEPTH (ft.)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
SILTY SAND (SM)-mostly fine sand, some low plasticity fines, brown, slightly moist, micaceous.	- 0		0 00	GS	148 00	PROTECTIVE CASING Diameter: N/A Type: N/A Interval: N/A RISER CASING Diameter: 2 inch Type: Sch 40 PVC Interval: 0 - 5.2 ft. GROUT Type: NA Interval: NA SEAL Type Bentonite Pellets Interval: 2.3 - 5.2 ft. FILTERPACK Type Medium Sand Interval: 5.2 - 10.2 ft. SCREEN Diameter 2 inch Type Sch 40 PVC 0.01 inch slot Interval: 5.2 - 10.2 ft.
						FILTER PACK FILTER PACK BENTONITE GS GROUND SURFACE BS BENTONITE SEAL FP FILTER PACK TSC TOP OF SCREEN TOO OF SCREEN BSC BOTTOM OF SCREEN TD TOTAL DEPTH CG CEMENT GROUT CEMENT GROUT

00 937A GPJ S&ME GDT

134 Suber Road Columbia, SC 29210 **COMPLETION REPORT OF** WELL No. B141A

PROJECT LOCATION: Columbia, South Carolina

WATER LEVEL Dry at time of boring. Dry on

10/13/00.

LATITUDE: DRILLING CONTRACTOR: LONGITUDE:

DRILLING METHOD: 41/4" H.S.A. DATE DRILLED: 10/3/00

TOP OF CASING ELEVATION: 148.00

DATUM: MSL

STRATA						LOGGED BY: JWB
	SYMBOL DEPTH (ft.)	WELL DETAILS	DEPTH (ft.)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
SILTY SAND (SM)- mostly fine sand, some low plasticity fines, brown, slightly moist, micaceous.	- 10 - 15		0 00	GS		PROTECTIVE CASING Diameter: N/A Type: N/A Interval: N/A RISER CASING Diameter 2 inch Type Sch 40 PVC Interval: 0 - 17.4 ft. GROUT Type: NA Interval: NA SEAL Type: Bentonite Pellets Interval: 13.5 - 17.4 ft. FILTERPACK Type: Medium Sand Interval: 17.4 - 22.4 ft. SCREEN Diameter: 2 inch Type Sch 40 PVC 0.01 inch slot Interval: 17.4 - 22.4 ft.
						FILTER PACK BENTONITE GS GROUND SURFACE BS BENTONITE SEAL FP FILTER PACK TSC TOP OF CASING GROUND SURFACE BS BENTONITE SEAL FP FILTER PACK TOP OF SCREEN TSC TOP OF SCREEN TOP OF SCREEN TOP OF CASING GROUND SURFACE TOP OF CASING GROUND SURFACE BSC BOTTOM OF SCREEN TD TOTAL DEPTH CG CEMENT GROUT



134 Suber Road Columbia, SC 29210 COMPLETION REPORT OF WELL No. B141B

PROJECT LOCATION: Columbia, South Carolina

WATER LEVEL: Dry at time of boring. Dry on

10/16/00.

LATITUDE:

DRILLING CONTRACTOR

DRILLING METHOD 41/4" H.S.A.

DATE DRILLED 10/4/00

LONGITUDE:

TOP OF CASING ELEVATION: 134.00

DATUM: MSL

STRATA	<u> </u>		WIELL			Z	LOGGED BY: JWB
DESCRIPTION	SYMBOL	DEPTH (ft.)	WELL DETAILS	DEPTH (ft.)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
LEAN CLAY (CL)- nostly low to medium plasticity fines, some ne sands 15-25%, noist to slightly moist, rades to silt ommonly, occasional plays and lenses.		5		0.00	GS	134.00	PROTECTIVE CASING Diameter N/A Type N/A Interval N/A RISER CASING Diameter 2 inch Type: Sch 40 PVC Interval: 0 - 4.5 ft. GROUT Type: NA Interval: NA SEAL Type: Bentonite Pellets Interval: 2.8 - 4.5 ft. FILTERPACK Type Medium Sand Interval: 4.5 - 9.5 ft. SCREEN Diameter 2 inch Type Sch 40 PVC 0.01 inch slot Interval: 4.5 - 9.5 ft.
						M. C. S.	FILTER PACK BENTONITE GS GROUND SURFACE BS BENTONITE BS BENTONITE BS CEMENT GROUT FP FILTER PACK TSC TOP OF SCREEN TOTAL DEPTH CG CEMENT GROUT CEMENT GROUT TOTAL DEPTH CG CEMENT GROUT

134 Suber Road Columbia, SC 29210 COMPLETION REPORT OF WELL No. B240A

PROJECT LOCATION: Columbia, South Carolina

WATER LEVEL 21 feet at time of boring, 18.1

feet on 10/16/00.

LATITUDE.

DRILLING CONTRACTOR:

DRILLING METHOD: 41/4" H.S.A.

DATE DRILLED: 10/4/00

LONGITUDE

TOP OF CASING ELEVATION: 135.80

DATUM: MSL

STRATA	Δ			1	T	T	LOGGED BY: JWB
DESCRIPTION	SYMBOL	DEPTH (ft.)	WELL DETAILS	DEPTH (ft)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
LEAN CLAY WITH SAND (CL)- mostly low to medium plasticity fines, some fine sands, brown, slightly moist to moist, micaceous.		- 5 - 10		0.00	GS	134.00	PROTECTIVE CASING Diameter: N/A Type: N/A Interval: N/A RISER CASING Diameter: 2 inch Type: Sch 40 PVC Interval: -1.8 - 23.2 ft. GROUT Type: NA Interval: NA SEAL Type Bentonite Pellets Interval: 16.6 - 21.9 ft. FILTERPACK Type Medium Sand
POORLY GRADED SAND (SP)- fine sands, visual classification from cuttings		20	¥				SCREEN Diameter 2 inch Type Sch 40 PVC 0.01 inch slot Interval 23.2 - 28.2 ft. LEGEND FILTER PACK BENTONITE BS GROUND SURFACE BS BENTONITE SEAL CEMENT GROUT FP FILTER PACK TOC TOP OF CASING GS GROUND SURFACE BS BENTONITE SEAL TOP OF SCREEN TOTAL DEPTH CG CEMENT GROUT



134 Suber Road Columbia, SC 29210 COMPLETION REPORT OF WELL No. B240B

PROJECT LOCATION: Columbia, South Carolina

WATER LEVEL 11.5 feet at time of boring,

14.3 feet on 10/14/00.

LATITUDE

DRILLING CONTRACTOR:

DRILLING METHOD: 41/4" H.S.A.

DATE DRILLED: 10/5/00

LONGITUDE:

TOP OF CASING ELEVATION: 135.00

DATUM: MSL

LOGGED BY: JWB

STRATA	Δ				7		LOGGED BY: JWB
DESCRIPTION	SYMBOL	DEPTH (ft.)	WELL DETAILS	DEPTH (ft)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
LEAN CLAY WITH SAND (CL)- mostly low to medium plasticity fines, some fine sands 20-30%, slightly moist, micaceous.		- 0 - - - - - 5		0.00	GS	132.00	PROTECTIVE CASING Diameter: N/A Type: N/A Interval: N/A RISER CASING Diameter: 2 inch Type: Sch 40 PVC Interval: -3 - 21.6 ft. GROUT Type: NA
SILTY SAND (SM)- mostly fine sands, some low plasticity fines 20-35%		15	Ţ				SEAL Type Bentonite Pellets Interval 8.9 - 19 ft. FILTERPACK Type Medium Sand Interval 19 - 26.6 ft. SCREEN
SANDS (SP)- fine to medium sands, gray, grades to POORLY GRADED SAND WITH SILT.		20					Diameter 2 inch Type Sch 40 PVC 0.01 inch slot Interval 21.6 - 26.6 ft.
		25					FILTER PACK FILTER PACK BENTONITE GS GROUND SURFACE BS BENTONITE SEAL FP FILTER PACK TSC TOP OF CASING GROUND SURFACE BS BENTONITE SEAL FP FILTER PACK TSC TOP OF SCREEN TSC TOP OF SCREEN TOP OF CASING GROUND SURFACE BSC BOTTOM OF SCREEN TOP OF CASING GROUND SURFACE BSC BOTTOM OF SCREEN TOP OF CASING GROUND SURFACE BSC BOTTOM OF SCREEN TOP OF CASING GROUND SURFACE BSC BOTTOM OF SCREEN TOP OF CASING GROUND SURFACE BSC BOTTOM OF SCREEN TOP OF CASING GROUND SURFACE BSC BOTTOM OF SCREEN TOP OF CASING GROUND SURFACE BSC BOTTOM OF SCREEN TOP OF CASING GROUND SURFACE BSC BOTTOM OF SCREEN TOP OF CASING GROUND SURFACE BSC TOP OF CASING BENTONITE SEAL TOP OF SCREEN TOP O

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ENGINEERING - TESTING
ENVIRONMENTAL SERVICES

134 Suber Road Columbia, SC 29210 COMPLETION REPORT OF WELL No. B253A

PROJECT LOCATION: Columbia, South Carolina

WATER LEVEL 11.5 feet at time of boring, 14

feet on 10/14/00.

LATITUDE: DRILLING CONTRACTOR:

DRILLING METHOD: 41/4" H.S.A. DATE DRILLED: 10/5/00

LONGITUDE: TOP OF CASING ELEVATION: 134.30

DATUM: MSL

LOGGED BY JWR

STRAT	A				1	T	LOGGED BY: JWB
DESCRIPTION		OEPTH (ft.)	WELL DETAILS	DEPTH (ft)	LEGEND	ELEVATION (ft.)	WELL CONSTRUCTION DETAILS
LEAN CLAY WITH SAND (CL)- mostly low to medium plasticity fines, some fine sands 20-30% slightly moist, micaceous.		5		0 00	GS	132.00	PROTECTIVE CASING Diameter: N/A Type: N/A Interval: N/A RISER CASING Diameter: 2 inch Type: Sch 40 PVC Interval: -2.25 -12.9 ft. GROUT Type NA Interval NA SEAL Type Bentonite Pellets
SILTY SAND (SM)- mostly fine sands, some low plasticity fines 20-30%	- 1-		Ψ.				FILTERPACK Type: Medium Sand Interval 12.9 - 17.9 ft. SCREEN Diameter: 2 inch Type: Sch 40 PVC 0.01 inch slot Interval: 12.9 - 17.9 ft. EGEND FILTER PACK BENTONITE GS GROUND SURFACE BS BENTONITE SEAL CEMENT GROUT FP FILTER PACK TOC TOP OF CASING GS GROUND SURFACE BS BENTONITE SEAL TOC TOP OF SCREEN TOTAL DEPTH CG CEMENT GROUT

134 Suber Road Columbia, SC 29210

COMPLETION REPORT OF WELL No. B253B

PROJECT LOCATION: Columbia, South Carolina

WATER LEVEL: Dry at time of boring. Dry on 10/16/00.

LATITUDE

DRILLING CONTRACTOR:

DRILLING METHOD: 41/4" H.S.A.

DATE DRILLED: 10/5/00

LONGITUDE

TOP OF CASING ELEVATION 132.50

DATUM MSL

LOGGED BY JWB

STRATA	<u> </u>			I	<u> </u>		LOGGED BY JWB
DESCRIPTION	SYMBOL	DEPTH (ft.)	WELL DETAILS	DEPTH (ft.)	LEGEND	ELEVATION (ft)	WELL CONSTRUCTION DETAILS
LEAN CLAY WITH SAND (CL)- mostly low to medium plasticity fines, some fine sands 20-30%, slightly moist, micaceous.		- 5		0.00	GS	132 00	PROTECTIVE CASING Diameter: N/A Type: N/A Interval: N/A RISER CASING Diameter: 2 inch Type: Sch 40 PVC Interval:5 - 3.9 ft. GROUT Type: NA Interval: NA SEAL Type: Bentonite Pellets Interval: 1.5 - 3.9 ft. FILTERPACK Type: Medium Sand Interval: 3.9 - 8.9 ft. SCREEN Diameter: 2 inch Type: Sch 40 PVC 0.01 inch slot Interval: 3.9 - 8.9 ft.
							FILTER PACK FILTER PACK BENTONITE BENTONITE CEMENT GROUT CUTTINGS / BACKFILL STATIC WATER LEVEL TOC TOP OF CASING GS GROUND SURFACE BS BENTONITE SEAL FP FILTER PACK TSC TOP OF SCREEN BSC BOTTOM OF SCREEN TO TOTAL DEPTH CG CEMENT GROUT



134 Suber Road Columbia, SC 29210

COMPLETION REPORT OF WELL No. B253C

APPENDIX D

							Sheet 1 of 1				
Borehole	Depth	Liquid Limit	Plastic Limit	Plasticity Index	Dry Unit Weight (pcf)	%<#200 Sieve	Class- ification	Opt Moisture Content	Dry Density (pcf)	Water Content (%)	CBR
B 102 A	23.0					26	SP				
B 102 B	8.0					37.6	SM			8.6	
B 126 A	60	46	26	20		79.5	CL			17.9	
B 126 B	7 0	46	24	22		84.9	CL			35.3	
B 127 A	20.0					35.7	SM			7.5	
B 141 A	10.0					17.5	SM			4 8	
B 141 B	23.0					17.0	SM			9.4	
B 240 A	90	41	25	16		87.3	CL			19.9	
B 240 B	23.0						SP			- 10:0	
B 253 A	23.0					10.0	SP-SM			34.2	
B 253 B	17.0					17 0	SM				
B 254 C	9.0	44	24	20		80 5	CL				



Summary of Laboratory Results

Project CONGAREE LEVEE

Location COLUMBIA, SOUTH CAROLINA

Number: 1611-00-937